

REMARKS

Claims 1-5 and 9-14 are pending in this application. Claims 1, 2, 5, 9, 11, 13, and 14 are presently amended. Claims 6-8 and 15-29 have been withdrawn from consideration.

In the Office Action dated March 24, 2006, the Examiner rejected claims 1-5 and 9-14. In particular, claims 1-5 and 9-14 were rejected under 35 U.S.C. § 112, ¶ 2 as being incomplete for omitting essential elements. In addition, claims 1-5 and 9-14 were rejected under 35 U.S.C. § 102(b) and § 103(a) as anticipated by, or, in the alternative, as obvious over U.S. Patent No. 6,172,344 ("Gordon et al.").

Applicants thank the Examiner for conducting a telephone interview on June 20, 2006.

In light of the amendments and arguments below, Applicants respectfully request that the rejections of the pending claims be withdrawn and the claims be allowed to issue.

Rejection of Claims 1-5 and 9-14 under § 112 ¶ 2

In the Office Action, the Examiner rejected claims 1-5 and 9-14 under 35 U.S.C. § 112, ¶ 2 for "being incomplete for omitting essential elements, such omission amounting to a gap between the elements." (Office Action at 2.) Specifically, the Examiner stated that claims 1-5 and 9-14 omitted "elements to produce the claimed operation of vibration as recited in the preamble of the claim." (*Id.*) Applicant respectfully disagrees with the Examiner's rejection.

Claims 1-5 and 9-14 require a "first conductor" and a "second conductor." As explained in the specification, these elements are sufficient to produce the claimed

operation of vibration. When two opposing current flows are created in the first and second conductors, the resulting magnetic field will result in a repulsive force, which will force the conductors apart. (Specification at ¶ 64.) This repulsive force results in a vibration of the conductors. (*Id.*) When the conductors are placed in a container or a tooling as claimed in claims 1-5 and 9-14, this will cause a vibration throughout the interior of the container or tooling. (*Id.*)

While Applicant disagrees with the Examiner's rejection, in order to advance prosecution, Applicant has amended claims 1, 2, 5, 9, 11, 13, and 14 to clarify that the first and second conductors produce the vibration in the claimed manner. Therefore, because the claims include elements sufficient to produce a vibration, Applicant respectfully requests that the Examiner withdraw this rejection.

Rejection of Claims 1-5 under § 102(b) over Gordon et al.

In order to anticipate claims 1-5, Gordon et al. must disclose each and every element of those claims, as amended. MPEP § 2131 (8th Ed., revised Oct. 2005).

Because Gordon et al. does not disclose at least:

- (1) "a vibration apparatus for tooling";
- (2) a "second layer of elastomeric material" located on a "first layer of elastomeric material," wherein a conductor is located within each layer;
- (3) a "cavity located between the top surface and the second layer," or
- (4) "a power source" or "a first power source" and a "second power source" "generating a first current in the first conductor thereby creating a first magnetic field around the first conductor" and "generating a second current opposite the first current in the second conductor thereby creating a second magnetic field around the second conductor, wherein

the first and second magnetic fields force the first and second conductors apart thereby forcing the first and second layers of elastomeric material apart; and wherein forcing the first and second layers of elastomeric material apart vibrates the container,”

Applicants respectfully request that the Examiner withdraw this rejection of claims 1-5.

All of claims 1-5, as amended, require (1) “a vibration apparatus for tooling” comprising (2) a “second layer of elastomeric material” located on a “first layer of elastomeric material,” wherein a conductor is located within each layer; (3) a “cavity located between the top surface and the second layer,” and (4) “a power source” or “a first power source” and a “second power source” “generating a first current in the first conductor thereby creating a first magnetic field around the first conductor” and “generating a second current opposite the first current in the second conductor thereby creating a second magnetic field around the second conductor.” As stated in claims 1-5, “the first and second magnetic fields force the first and second conductors apart thereby forcing the first and second layers of elastomeric material apart.” In turn, “forcing the first and second layers of elastomeric material apart vibrates the container.”

In contrast, Gordon et al. discloses a heating device comprised of a fabric web on which conductive strips have been placed. See, e.g., Figures 1-2, Col. 3-Col. 4. The web and conductive strips are then encapsulated by a plastic web of material. *Id.* In operation, a current is passed through one conductive strip through the fabric web to the second conductive strip. The resistance in the fabric web causes the temperature of the fabric web to rise as current is passed through it, thus allowing the device to be used for heating.

Gordon et al. does not disclose several elements of claims 1-5.

First, Gordon et al. does not disclose “a vibration apparatus for a tooling.” All the embodiments of Gordon et al. involve the use of the invention as a heating device. There is no disclosure of using the device with a tooling or to create a vibration in a tooling and the Examiner has not pointed to any.

The Examiner argues that the device may inherently operate in vibration “at least in the electro-mechanical scale in the same manner in which the circuit of applicants device is switched on and off in vibration.” (Office Action at 3.) As indicated in claims 1-5, a tooling is vibrated by creating opposing currents in the first and second conductors. As is evident from Figures 9-10 of Gordon et al., only a single current is applied to the conducting strips of the device of Gordon et al. This is because in order to heat the material, current must pass from one conductive strip to another through the fabric web in order to heat the fabric web. Therefore, Applicants respectfully assert that Gordon et al. would not inherently create vibration.

Second, Gordon et al. also does not disclose a structure having a “second layer of elastomeric material” located on a “first layer of elastomeric material,” wherein a conductor is located within each layer as required by claims 1-5. Gordon et al. discloses only conducting strips located between a layer of fabric and a layer of plastic.

Third, Gordon et al. still further does not disclose a “cavity located between the top surface [of the container] and the second layer” as required by claims 1-5, and the Examiner has not pointed to any such disclosure.

Fourth, Gordon et al. does not disclose “a power source” or “a first power source” and a “second power source” “generating a first current in the first conductor thereby creating a first magnetic field around the first conductor” and “generating a second

current opposite the first current in the second conductor thereby creating a second magnetic field around the second conductor, wherein the first and second magnetic fields force the first and second conductors apart thereby forcing the first and second layers of elastomeric material apart; and wherein forcing the first and second layers of elastomeric material apart vibrates the container.” As explained above, in Gordon et al., only a single current is applied to the conducting strips of the device of Gordon et al. Therefore, Gordon et al. does not disclose applying opposing currents, which force the conductors apart causing a vibration in the container.

Therefore, because Gordon et al. does not disclose each and every element of claims 1-5, Applicant respectfully requests that the rejection of claims 1-5 be withdrawn.

Rejection of Claims 9-14 under § 102(b) over Gordon et al.

The Examiner also rejected claims 9-14 as being anticipated by Gordon et al. Because Gordon et al. does not disclose each and every element of these claims, Applicants respectfully request that the Examiner withdraw this rejection.

All of claims 9-14, as amended, require either a method or system for “vibrating tooling.” In addition, claims 9-14, as amended, require (1) “generating,” “a generating component configured to generate” or “generating means for generating” a “first current flow in a first conductor located in the tooling thereby creating a first magnetic field around the first conductor;” and (2) “producing,” “a producing component configured to produce,” or a “producing means for producing” a “vibration in [a] tooling by generating a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor thereby creating a second magnetic field around the second conductor.” In claims 9-14, “the first and second magnetic

fields force the first and second conductors apart.” Further, “forcing the first and second conductors apart produces the vibration in the tooling.”

As explained above, Gordon et al. does not disclose methods or systems to be used with tooling at all, let alone for causing “vibration” in a tooling. In addition, Gordon et al. does not disclose generating a “first current flow in a first conductor located in the tooling thereby creating a first magnetic field around the first conductor” and “a second current flow opposite the first current flow in a second conductor located in the tooling . . . thereby creating a second magnetic field around the second conductor” as required by claims 9-14. As is evident from Figures 9-10 of Gordon et al., only a single current is applied to the conducting strips of the device of Gordon et al. This is because in order to heat the material, current must pass from one conductive strip to another through the fabric web in order to heat the fabric web.

Thus, because Gordon et al. does not disclose at least these elements of claims 9-14, Applicant respectfully requests that this rejection of claims 9-14 be withdrawn.

Rejection of Claims 1-5 and 9-14 under § 103(a) over Gordon et al.

To establish a *prima facie* case of obviousness, the MPEP requires that the Examiner demonstrate (1) some suggestion or motivation to modify the reference or combine reference teachings; (2) a reasonable expectation of success; and (3) that the prior art references teach or suggest all the claim limitations. MPEP § 2142 (8th Ed., revised Aug. 2005). A *prima facie* case of obviousness of claims 1-5 and 9-14 cannot be established based on Gordon et al., because the Examiner has not demonstrated the three requirements of MPEP 2142. In particular, Gordon et al. does not teach or suggest all the claim limitations, and Gordon et al. is non-analogous art. Therefore, for

at least these reasons, as described below, the rejection of claims 1-5 and 9-14 should be withdrawn.

As explained above, Gordon et al. does not teach or suggest all the limitations of claims 1-5 and 9-14. Specifically, with respect to claims 1-5, Gordon et al. does not disclose at least (1) “a vibration apparatus for tooling”; (2) a “second layer of elastomeric material” located on a “first layer of elastomeric material,” wherein a conductor is located within each layer; (3) a “cavity located between the top surface and the second layer”; or (4) “a power source” or “a first power source” and a “second power source” “generating a first current in the first conductor thereby creating a first magnetic field around the first conductor” and “generating a second current opposite the first current in the second conductor thereby creating a second magnetic field around the second conductor, wherein the first and second magnetic fields force the first and second conductors apart thereby forcing the first and second layers of elastomeric material apart; and wherein forcing the first and second layers of elastomeric material apart vibrates the container.” Similarly, with respect to claims 9-14, Gordon et al. does not at least disclose (1) a method or system for “vibrating tooling”; (2) “generating,” “a generating component configured to generate” or “generating means for generating” a “first current flow in a first conductor located in the tooling thereby creating a first magnetic field around the first conductor;” or (3) “producing,” “a producing component configured to produce,” or a “producing means for producing” a “vibration in [a] tooling by generating a second current flow opposite the first current flow in a second conductor located in the tooling and being in proximity to the first conductor thereby creating a second magnetic field around the second conductor.” Therefore, since Gordon et al.

does not disclose each and every element of claims 1, 3-5 and 9-14, this rejection should be withdrawn.

In addition, the Examiner's reliance on Gordon et al. is misplaced because to be relevant to an obvious determination, references must either be from the same field of endeavor as the claimed invention, or otherwise must be reasonably pertinent to the particular problem to be solved. MPEP § 2141.01(a). Gordon et al. is not analogous under either of these criteria, and therefore cannot be relied upon in determining obviousness.

Gordon et al. is not in the same field of endeavor as Applicant's invention. Applicant's field of endeavor is vibration apparatus, systems, and methods for toolings. Gordon et al.'s field of endeavor is resistance heated fabrics. Resistance heated fabrics are significantly different from vibration apparatus, systems, and methods for toolings both in structure and purpose. A resistance heated fabric is designed to use the resistive properties of a material to generate heat for use in warming items. A vibration apparatus, system, or method for a tooling is designed to assist the compaction or extraction of media from a tooling, which is used to create a structure based on that tooling, such as a molded composite. There is nothing in Gordon et al. that would suggest that Gordon et al. would have any utility in toolings and in particular for vibration in a tooling.

The Federal Circuit has defined fields of endeavor narrowly. *See, e.g., Wang Labs., Inc. v. Toshiba Corp.*, 26 U.S.P.Q.2d 1767 (Fed. Cir. 1993) (modular memory circuits of varying sizes are not analogous to compact modular memory circuits); *In re Clay*, 23 U.S.P.Q.2d 1058, 1060 (Fed. Cir. 1992) (a process relating to petroleum

extraction is not analogous to a process relating to petroleum storage). Given that the law construes "field of endeavor" narrowly, the fields occupied by Gordon et al. and Applicant, respectively, do not overlap. Accordingly, the disclosures are not from the same field of endeavor.

Nor is the disclosure of Gordon et al. reasonably pertinent to the particular problem to be solved. "The **purposes** of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem it attempts to solve . . . if it is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it." *Clay*, at 1061 (emphasis added). Applicant's application provides apparatus, systems, and methods for vibrating tooling. Gordon et al., in contrast, is not seeking to provide vibration at all let alone in a tooling. Therefore, due to the lack of overlap in purpose between this application and Gordon et al., there would have been little motivation or occasion to consider the Gordon et al. reference. Without a shared purpose, the Gordon et al. reference is not pertinent to the particular problem that Applicant sought to solve. As a result, the Gordon et al. disclosure is from a non-analogous art, and therefore is not within the scope of the prior art available for making an obviousness determination.

Thus, because the Examiner has not satisfied MPEP 2142, and specifically because Gordon et al. does not teach or suggest all the limitations of claims 1, 3-5 and 9-14 and because Gordon et al. is non-analogous art, Applicants respectfully request that the rejection of claims 1-5 and 9-14 over this reference be withdrawn.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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